1. A method of translating addresses in a communication network having multiple overlapping address domains, the method comprising the steps of:

receiving an overlapping local address from an inbound address domain; and

translating the overlapping local address from the inbound address domain into a unique global address that is specific to a specified outbound address domain.

2. The method of claim 1, wherein the step of translating the overlapping local address from the inbound address domain into the unique global address that is specific to the specified outbound address domain comprises the steps of:

selecting the unique global address from among a number of available global network addresses; and

mapping the unique global address to the overlapping local address from the inbound address domain exclusively for the specified outbound address domain.

3. The method of claim 1, wherein the step of translating the overlapping local address from the inbound address domain into the unique global address that is specific to the specified outbound address domain comprises the steps of:

maintaining a number of address translation entries, each address translation entry mapping a local address from one of a number of overlapping inbound address domains to a corresponding global address that is specific to one of a number of overlapping outbound address domains;

finding an address translation entry mapping the overlapping local address from the inbound address domain to the unique global address that is specific to the specified outbound address domain; and

extracting the unique global address from the address translation entry.

4. The method of claim 3, wherein each address translation entry comprises an inbound

local address field, an outbound address domain field, and an outbound global address field, and wherein the step of maintaining the number of address translation entries comprises:

selecting a network address from among a number of available network addresses; and

creating an address translation entry having the inbound local address field equal to the local address, the outbound address domain field equal to the specified outbound address domain, and the outbound global address field equal to the selected network address.

5. The method of claim 3, wherein each address translation entry comprises an inbound local address field, an outbound address domain field, and an outbound global address field, and wherein the step of finding the address translation entry mapping the overlapping local address from the inbound address domain to the unique global address that is specific to the specified outbound address domain comprises finding the address translation entry having the inbound local address field equal to the overlapping local address and the outbound address domain field equal to the specified outbound address domain.

6. The method of claim 1, wherein the step of receiving the overlapping local address from the inbound address domain comprises receiving a translation request message as part of a domain name resolution procedure.

7. The method of claim 6, wherein the translation request message includes the overlapping local address and further specifies the outbound address domain.

8. The method of claim 7, wherein the overlapping local address is a destination host local address from a destination address domain, and wherein the outbound address domain is a source address domain.

9. The method of claim 6, further comprising the step of transmitting a translation response

message including the unique global address.

10. The method of claim 1, wherein the step of receiving the overlapping local address from the inbound address domain comprises receiving a packet from a source host in a source (inbound) address domain that is destined for a destination host in a destination (outbound) address domain and includes a source address equal to an overlapping source host local address from the source (inbound) address domain and a destination address equal to a unique destination host global address.

11. The method of claim 10, wherein the step of translating the overlapping local address from the inbound address domain into the unique global address that is specific to the specified outbound address domain comprises the steps of:

maintaining a number of source address translation entries, each source address translation entry mapping a source host local address from one of a number of overlapping source (inbound) address domains to a corresponding source host global address that is specific to one of a number of overlapping destination (outbound) address domains;

determining the source (inbound) address domain for the packet;

determining the destination (outbound) address domain for the packet;

translating the source address in the packet from the overlapping source host local address in the source (inbound) address domain into a unique source host global address that is specific to the destination (outbound) address domain; and

forwarding the translated packet to the destination host over the destination (outbound) address domain.

12. The method of claim 11, wherein the step of translating the source address in the packet comprises the steps of:

selecting the source host global address from a pool of network addresses; and

creating a source address translation entry mapping the overlapping source host local address from the source (inbound) address domain for the packet to the source host global address that is specific to the destination (outbound) address domain for the packet.

13. The method of claim 11, wherein the step of translating the source address in the packet comprises the steps of:

finding a source address translation entry mapping the overlapping source host local address from the source (inbound) address domain for the packet to a unique source host global address that is specific to the destination (outbound) address domain for the packet;

extracting the source host global address from the source address translation entry;

14. The method of claim 13, wherein the step of maintaining the number of source address translation entries comprises maintaining a number of source address translation tables, each source address translation table consisting of those source address translation entries mapping the source host local addresses from a common source (inbound) address domain, and wherein the step of finding the source address translation entry mapping the overlapping source host local address from the source (inbound) address domain for the packet to the unique source host global address that is specific to the destination (outbound) address domain for the packet comprises selecting a source address translation table based upon the source (inbound) address domain for the packet.

15. The method of claim 14, wherein each source address translation entry comprises a source local address field, a destination (outbound) address domain field, and a source global address field, and wherein the step of finding the source address translation entry mapping the overlapping source host local address from the source (inbound) address domain for the packet to the unique source host global address that is specific to the destination (outbound) address domain for the packet comprises finding the source address translation entry having the source

local address field equal to the overlapping source host local address and the destination (outbound) address domain field equal to the destination (outbound) address domain for the packet.

16. The method of claim 14, wherein each source address translation entry comprises a source local address field, a source (inbound) address domain field, a destination (outbound) address domain field, and a source global address field, and wherein the step of finding the source address translation entry mapping the overlapping source host local address from the source (inbound) address domain for the packet to the unique source host global address that is specific to the destination (outbound) address domain for the packet comprises finding the source address translation entry having the source local address field equal to the overlapping source host local address, the source (inbound) address domain field equal to the source (inbound) address domain for the packet, and the destination (outbound) address domain field equal to the destination (outbound) address domain for the packet.

17. The method of claim 11, wherein the step of determining the source (inbound) address domain for the packet comprises determining the source (inbound) address domain for the packet implicitly based upon a network interface over which the packet is received.

18. The method of claim 11, further comprising the step of maintaining a number of destination address translation entries, each destination address translation entry mapping a destination host global address that is specific to a source (inbound) address domain to a corresponding destination host local address for a corresponding destination (outbound) address domain.

19. The method of claim 18, wherein each destination address translation entry maps a destination host global address to a corresponding destination (outbound) address domain, and

wherein the step of determining the destination (outbound) address domain for the packet comprises the steps of:

finding a destination address translation entry for the destination host global address in the packet; and

extracting the destination (outbound) address domain from the destination address translation entry.

20. The method of claim 18, wherein each destination address translation entry maps the destination host global address to a corresponding source (inbound) address domain, and wherein the step of determining the source (inbound) address domain for the packet comprises the steps of:

finding a destination address translation entry for the destination host global address in the packet; and

extracting the source (inbound) address domain from the destination address translation entry.

21. The method of claim 18, wherein each destination address translation entry maps the destination host global address to a corresponding destination host local address for the destination (outbound) address domain, and wherein the method further comprises the steps of:

finding a destination address translation entry for the destination host global address in the packet;

extracting the destination host local address from the destination address translation entry; and

translating the destination address in the packet from the destination host global address to the corresponding destination host local address extracted from the destination address translation entry.

22. A program product comprising a computer readable medium having embodied therein a computer program for translating addresses in a communication network having multiple overlapping address domains, the computer program comprising:

receiving logic programmed to receive an overlapping local address from an inbound address domain; and

translating logic programmed to translate the overlapping local address from the inbound address domain into a unique global address that is specific to a specified outbound address domain.

23. The program product of claim 22, wherein the receiving logic is programmed to receive a translation request message as part of a domain name resolution procedure.

24. The program product of claim 23, wherein the translation request message includes the overlapping local address and further specifies the outbound address domain.

25. The program product of claim 24, wherein the overlapping local address is a destination host local address from a destination address domain, and wherein the outbound address domain is a source address domain.

26. The program product of claim 24, wherein the translating logic is programmed to select the unique global address from among a number of available network addresses and map the unique global address to the overlapping local address from the inbound address domain exclusively for the specified outbound address domain

27. The program product of claim 22, wherein the receiving logic is programmed to receive a packet from a source host in a source (inbound) address domain that is destined for a destination host in a destination (outbound) address domain and includes a source address equal to an

overlapping source host local address from the source (inbound) address domain and a destination address equal to a unique destination host global address.

28. The program product of claim 27, comprising:

mapping logic operably coupled to maintain a number of address translation entries in a memory, each source address translation entry mapping a source host local address from one of a number of overlapping source (inbound) address domains to a corresponding source host global address that is specific to one of a number of overlapping destination (outbound) address domains;

the receiving logic programmed to receive the packet from the source host in the source (inbound) address domain that is destined for the destination host in the destination (outbound) address domain and includes the source address equal to the overlapping source host local address from the source (inbound) address domain and the destination address equal to the unique destination host global address;

the translating logic programmed to translate the source address in the packet from the overlapping source host local address in the source (inbound) address domain into a corresponding unique source host global address that is specific to the destination (outbound) address domain for the packet; and

packet forwarding logic programmed to forward the translated packet to the destination host over the destination (outbound) address domain.

29. The program product of claim 28, wherein the translating logic is programmed to select the source host global address from a pool of network addresses and create an address translation entry mapping the overlapping source host local address from the source (inbound) address domain for the packet to the source host global address that is specific to the destination (outbound) address domain for the packet.

30. The program product of claim 28, wherein the translating logic is programmed to find an address translation entry mapping the overlapping source host local address from the source (inbound) address domain for the packet to the source host global address that is specific to the destination (outbound) address domain for the packet and extract the source host global address from the source address translation entry.

31. The program product of claim 30, wherein the mapping logic maintains a number of source address translation tables, each source address translation table consisting of those address translation entries mapping the source host local addresses from a common source (inbound) address domain; and wherein the translating logic is programmed to determine the source (inbound) address domain for the packet and select a source address translation table based upon the source (inbound) address domain for the packet.

32. The program product of claim 31, wherein each address translation entry comprises a source local address field, a destination (outbound) address domain field, and a source global address field, and wherein the translating logic is programmed to find an address translation entry having the source local address field equal to the overlapping source host local address and the destination (outbound) address domain field equal to the destination (outbound) address domain for the packet.

33. The program product of claim 30, wherein each address translation entry comprises a source local address field, a source (inbound) address domain field, a destination (outbound) address domain field, and a source global address field, and wherein the translating logic is programmed to determine the source (inbound) address domain for the packet and find an address translation entry having the source local address field equal to the overlapping source host local address, the source (inbound) address domain field equal to the source (inbound) address domain for the packet, and the destination (outbound) address domain field equal to the

destination (outbound) address domain for the packet.

34. The program product of claim 28, wherein the translating logic is programmed to translate the destination address in the packet from the unique destination host global address into a corresponding destination host global address in the destination (outbound) address domain..

35. The program product of claim 34, wherein each address translation entry maps a destination host global address to a corresponding destination (outbound) address domain, and wherein the translating logic is programmed to determine the destination (outbound) address domain for the packet by finding an address translation entry for the destination host global address and extracting the destination (outbound) address domain from the address translation entry.

36. The program product of claim 35, wherein each address translation entry maps the destination host global address to a corresponding source (inbound) address domain, and wherein the translating logic is programmed to determine the source (inbound) address domain for the packet by finding an address translation entry for the destination host global address and extracting the source (inbound) address domain from the address translation entry.

37. The program product of claim 35, wherein each address translation entry maps the destination host global address to a corresponding destination host local address for the destination (outbound) address domain, and wherein the translating logic is programmed to find an address translation entry mapping the destination host global address in the packet to the corresponding destination host local address in the destination (outbound) address domain.

38. The program product of claim 37, wherein each address translation entry comprises a

destination global address field and a destination local address field, and wherein the translating logic is programmed to find the address translation entry having the destination global address field equal to the unique destination host global address and extract the destination host local address from the destination local address field of the address translation entry.

39. An apparatus for translating addresses in a communication network having multiple overlapping address domains, the apparatus comprising:

receiving logic operably coupled to receive an overlapping local address from an inbound address domain; and

translating logic operably coupled to translate the overlapping local address from the inbound address domain into a unique global address that is specific to a specified outbound address domain.

40. The apparatus of claim 39, wherein the receiving logic is operably coupled to receive a translation request message as part of a domain name resolution procedure.

41. The apparatus of claim 40, wherein the translation request message includes the overlapping local address and further specifies the outbound address domain.

42. The apparatus of claim 41, wherein the overlapping local address is a destination host local address from a destination address domain, and wherein the outbound address domain is a source address domain.

43. The apparatus of claim 41, wherein the translating logic is operably coupled to select the unique global address from among a number of available network addresses.

44. The apparatus of claim 39, wherein the receiving logic is operably coupled to receive a packet from a source host in a source (inbound) address domain that is destined for a destination host in a destination (outbound) address domain and includes a source address equal to an overlapping source host local address from the source (inbound) address domain and a destination address equal to a unique destination host global address.

45. The apparatus of claim 44, comprising:

mapping logic operably coupled to maintain a number of address translation entries in a memory, each address translation entry mapping a local address from one of a number of overlapping inbound address domains to a corresponding global address that is specific to one of a number of overlapping outbound address domains;

the receiving logic operably coupled to receive the packet from the source host in the source (inbound) address domain that is destined for the destination host in the destination (outbound) address domain and includes the source address equal to the overlapping source host local address from the source (inbound) address domain and the destination address equal to the unique destination host global address;

the translating logic operably coupled to translate the source address in the packet from the overlapping source host local address in the source (inbound) address domain into a corresponding unique source host global address that is specific to the destination (outbound) address domain for the packet; and

packet forwarding logic operably coupled to forward the translated packet to the destination host over the destination (outbound) address domain.

46. The apparatus of claim 45, wherein the translating logic is operably coupled to select the source host global address from a pool of network addresses and create an address translation entry mapping the overlapping source host local address from the source (inbound) address domain for the packet to the source host global address that is specific to the destination (outbound) address domain for the packet.

47. The apparatus of claim 45, wherein the translating logic is operably coupled to find an address translation entry mapping the overlapping source host local address from the source (inbound) address domain for the packet to the source host global address that is specific to the destination (outbound) address domain for the packet and extract the source host global address

from the source address translation entry.

48. The apparatus of claim 47, wherein the mapping logic maintains a number of source address translation tables, each source address translation table consisting of those address translation entries mapping the source host local addresses from a common source (inbound) address domain; and wherein the translating logic is operably coupled to determine the source (inbound) address domain for the packet and select a source address translation table based upon the source (inbound) address domain for the packet.

49. The apparatus of claim 48, wherein each address translation entry comprises a source local address field, a destination (outbound) address domain field, and a source global address field, and wherein the translating logic is operably coupled to find an address translation entry having the source local address field equal to the overlapping source host local address and the destination (outbound) address domain field equal to the destination (outbound) address domain for the packet.

50. The apparatus of claim 47, wherein each address translation entry comprises a source local address field, a source (inbound) address domain field, a destination (outbound) address domain field, and a source global address field, and wherein the translating logic is operably coupled to determine the source (inbound) address domain for the packet and find an address translation entry having the source local address field equal to the overlapping source host local address, the source (inbound) address domain field equal to the source (inbound) address domain for the packet, and the destination (outbound) address domain field equal to the destination (outbound) address domain for the packet.

51. The apparatus of claim 45, wherein the translating logic is operably coupled to translate the destination address in the packet from the unique destination host global address into a

corresponding destination host global address in the destination (outbound) address domain..

52. The apparatus of claim 51, wherein each address translation entry maps a destination host global address to a corresponding destination (outbound) address domain, and wherein the translating logic is operably coupled to determine the destination (outbound) address domain for the packet by finding an address translation entry for the destination host global address and extracting the destination (outbound) address domain from the address translation entry.

53. The apparatus of claim 52, wherein each address translation entry maps the destination host global address to a corresponding source (inbound) address domain, and wherein the translating logic is operably coupled to determine the source (inbound) address domain for the packet by finding an address translation entry for the destination host global address and extracting the source (inbound) address domain from the address translation entry.

54. The apparatus of claim 52, wherein each address translation entry maps the destination host global address to a corresponding destination host local address for the destination (outbound) address domain, and wherein the translating logic is operably coupled to find an address translation entry mapping the destination host global address in the packet to the corresponding destination host local address in the destination (outbound) address domain.

55. The apparatus of claim 54, wherein each address translation entry comprises a destination global address field and a destination local address field, and wherein the translating logic is operably coupled to find the address translation entry having the destination global address field equal to the unique destination host global address and extract the destination host local address from the destination local address field of the address translation entry.

56. In a communication system including a source host in a source (inbound) address domain communicating with a destination host in a destination (outbound) address domain by way of a network address translator, a method comprising the steps of:

transmitting, by the source host in the source (inbound) address domain, a packet including a source address equal to a source host local address in the source (inbound) address domain and a destination address equal to a destination host global address;

receiving the packet by the network address translator;

translating, by the network address translator, at least the source address from the source host local address to a unique source host global address that is specific to the destination (outbound) address domain; and

forwarding the translated packet by the network address translator to the destination host in the destination (outbound) address domain.

57. The method of claim 56, wherein the step of translating the source address comprises selecting the source host global address from a pool of network addresses.

58. The method of claim 56, wherein the step of translating the source address comprises the steps of:

maintaining a number of address translation entries, each address translation entry mapping a source host local address from one of a number of overlapping source (inbound) address domains to a corresponding source host global address that is specific to one of a number of overlapping destination (outbound) address domains;

determining the source (inbound) address domain for the packet;

determining the destination (outbound) address domain for the packet;

finding an address translation entry mapping the source host local address in the source (inbound) address domain to the source host global address for the destination (outbound) address domain; and

extracting the source host global address from the address translation entry.

59. The method of claim 56, further comprising the step of translating, by the network address translator, the destination address from the destination host global address to a destination host local address in the destination (outbound) address domain.

60. A communication system comprising:

a source host in a source (inbound) address domain;

a destination host in a destination (outbound) address domain; and

a network address translator in communication with the source host and the destination host, wherein:

the source host is operably coupled to transmit to the network address translator a packet including a source address equal to a source host local address in the source (inbound) address domain; and

the network address translator is operably coupled to translate at least the source address of the packet from the source host local address to a unique source host global address that is specific to the destination (outbound) address domain, and is further operably coupled to forward the translated packet to the destination host in the destination (outbound) address domain.

61. The communication system of claim 60, wherein the packet further includes a destination address equal to a unique destination host global address that is specific to the source (inbound) address domain, and wherein the network address translator is further operably coupled to translate the destination address of the packet from the destination host global address to a destination host local address in the destination (outbound) address domain.